

*f.—Spontaneous combustion (?)*.—In the Richmond coalfield great trouble has been caused by what is called spontaneous combustion. Judging from the similarity of the coals it seems possible that this same difficulty may obtain here. While this is a mere supposition, it is one that cannot safely be ignored. Mine fires are such serious disasters that every possible precaution should be taken to prevent them, and when there is any reason to suspect the possibility of spontaneous combustion, it seems essential to anticipate the danger by any possible precautionary measures that can be taken.

*g.—Absence of coal over certain areas.*—The failure to find the outcrop of the coal between Egypt and the Taylor place and between the latter place and the Gulf workings, and the demonstrated absence of the coal on parts of the Farmville property are sufficient evidence that over some areas the coal is entirely absent. It has not been possible to define the exact limits of such areas. This must be done by the individuals or companies owning or operating each tract. To ignore the existence of such barren areas and to plan developments upon the assumption of a continuous unbroken bed of workable size would be to invite failure, and as such a plan would inevitably be followed by disheartening failures in many if not in every case, it seems necessary to determine the exact limits of such areas in advance of developments and before the coal is actually opened for mining. A complete series of bore-holes is necessary to give this information, and these holes must be located only short distances apart.

#### METHOD OF DEVELOPMENT.

The methods necessary to insure financial success in operating in this district have already been indicated. The tract to be developed should be completely riddled with bore-holes to determine the local condition (thickness, quality, depth) of the bed at every point before attempting to open the coal for actual mining.